

PATENT CLAIMS

1. Method for releasing cables (2) from an attached well tool, where a cable cutter (6) is arranged between the main part of a cable and a well tool, said cable cutter being
5 controlled by a timer, **characterised in that** at least three parameters are used for controlling the cutter, e.g. a pulling force exerted by the cable on the well tool, the pressure in the well location, and time, where the timer (1) is working electronically.
2. Method according to claim 1, **characterised in that** the temperature is further used as a controlling parameter.
- 10 3. Method according to claim 1 or 2, **characterised in that** the timer is reset from currents in the cable (2) through the use of an interface pick-up (3).
4. Method according to any of the preceding claims **characterised in that** the timer (1) is also responsive to pulses of currents thereby making it possible to the operative crew to remotely control the preset parameter values of force, pressure, temperature, or
15 timer delay and thus the triggering of the cutter (6).
5. Method according to any of the preceding claims **characterised in that** the electronic timer is controlled by pulses smaller than the reset pulses, given by the operative crew from the surface to remotely control the preset timer delay and the triggering of the cutter.
- 20 6. Method according to claim 5, **characterised in that** the preset values for the pressure tensile stress or temperature can be changed from the surface crew.
7. Method according to claim 5, **characterised in that** a capacitor is arranged between the cable and ground.
8. Method according to any of the preceding claims **characterised in that** the pull-
25 ing force exerted by the cable on the well tool is limited by a mechanical unit.
9. Method according to claim 8, **characterised in that** the mechanical unit is capable of giving an output signal to the timer when the pulling force exceeds the limit.
10. Apparatus for releasing cables (2) from an attached well tool, where a cable cutter (6) is arranged between the main part of a cable and a well tool, said cable cutter being
30 controlled by a timer, **characterised in that** the electronic timer comprises a receiver (1) for receiving reset signals generated by the currents in the cable (2), auxiliary inlets

for signals from sensors for physical parameters, and an outlet for the control of the cutter control (4).

11. Apparatus according to claim 10, **characterised in that** the reset signals are generated using a pick-up (3).

5 12. Apparatus according to claim 11, **characterised in that** the receiver (1) further has at least one circuit controlled by small pulses from the cable (2), which is connected to the ground through a capacitor (5).

13. Apparatus according to claim 12, **characterised in that** a pulse generator on the surface is connected to the cable (2).

10 14. Apparatus according to claim 10, **characterised in that** the cutter control (4) is connected to the cutter (6).